Skeena Region

MANAGEMENT DIRECTION STATEMENT

March 2003

for Charlie Cole Creek Ecological Reserve

BRITISH COLUMBIA

Ministry of Water, Land and Air Protection
Environmental Stewardship Division

Blue/Dease Rivers Ecological Reserve Approvals Page

Forward

This management direction statement for Blue/Dease Rivers Ecological Reserve provides management direction until such time as it is revised. Ongoing consultation between Environmental Stewardship Division and First Nations may result in revisions as required. Aboriginal rights are honoured and respected within the ecological reserve.

Implementation of strategies identified in the management direction statement will be dependent on available funding and Environmental Stewardship Division priorities

Approvals:

Regional Manager
Skeena Region
Environmental Stewardship Division

Assistant Deputy Minister
Environmental Stewardship Division

This page left blank on purpose-

105-07054/

Table of Contents

Page

Approvals Page
Forward i

Introduction
Purpose of the Management Direction Statement 1
Context 1

Ecological Reserve Attributes
Conservation 2
Education and Research 2
Commercial Business Opportunities 2
Cultural Heritage 2
Significance in the Protected Areas System 2

Land Uses, Tenures and Interests
Access 4
Existing Tenures, Alienations and Encumbrances 4
Existing Land Use Activities and Facilities 4
Adjacent Patterns of Land Use 4
First Nations Interests 4
Other Agency Interests 4
Private and Public Stakeholder Interests 4

Role of Charlie Cole Creek Ecological Reserve 4

Management Commitments and Issues
Management Direction from Previous Planning 6
Management Issues 6

Management Direction
Priority Management Objectives and Strategies 6
Consultation and Future Planning 7

Figures
Figure 1 Regional Context Map 3
Figure 2 Ecological Reserve Map 5

Appendices
Table of Acceptable Activities, Uses and Facilities 8

Charlie Cole Creek Ecological Reserve

Management Direction Statement

Introduction

Purpose of the MDS

Management direction statements (MDS) provide strategic management direction for protected areas that do not have an approved management plan. Management direction statements also describe protected area values, management issues and concerns; a management strategy focused on immediate priority objectives and strategies; and, direction from other planning processes. While strategies may be identified in the MDS, the completion of all these strategies is dependent on funding and funding procedures. All development associated with these strategies is subject to the Parks and Protected Areas Branch's Impact Assessment Policy.

Context

The objective of the ecological reserve program in British Columbia is the conservation of representative and special natural ecosystems, plants and animal species, features and phenomena. Ecological reserves contribute to the maintenance of biological diversity and the protection of genetic materials. They also offer opportunities for scientific research and educational activities. In most ecological reserves, non-consumptive low-intensity uses such as nature appreciation, wildlife viewing, bird watching and photography are allowed.

The provincial government established Charlie Cole Creek Ecological Reserve (E.R. #102) as an ecological reserve on April 9, 1981 by Order-in-Council 875/81 under the authority of the *Ecological Reserve Act*. The *Protected Areas of British Columbia Act* provided legislated status to the ecological reserve boundaries on June 29, 2000. The ecological reserve covers 162 hectares on the Kawdy Plateau, and lies within the Teslin Basin Ecosection, and the Boreal White and Black Spruce Biogeoclimatic Zone. This is the only ecological reserve within the Yukon River drainage in British Columbia. The Teslin Tlingit Council and the Taku River Tlingit First Nation identified Charlie Cole Creek Ecological Reserve as being within their asserted traditional territory.

Charlie Cole Creek Ecological Reserve protects three cold-water mineral springs and their associated landforms and vegetation. These springs are rare in northern British Columbia, with one spring having formed an elevated circular cone 20 metres in diameter and 6.5 metres high. The crater of this cone is filled with water and has springs in the bottom. The calc-tufa rock that makes up the cone is lightweight and crumbly, and is formed by the deposition of calcium carbonate on plant roots and other organic matter. The decomposition of the organic material has left the calc-tufa honeycombed and sponge-like. The other two springs have not formed cones but have left red and yellow deposits downstream of the springs. The calcium-rich deposits left by the springs have numerous plant species associated with them that are either rare or at the outer limits of their geographical range. These plants in turn form rare and/or unusual plant communities that are not listed here because they have not been completely inventoried. The remainder of the ecological reserve contains glacially shaped landforms with undulating and subdued relief.

Charlie Cole Creek Ecological Reserve is located near the south end of Teslin Lake, 100 kilometres east of Atlin and 150 kilometres northwest of Dease Lake. The nearest protected areas to Charlie Cole Creek Ecological Reserve include Tuya Mountains Provincial Park located 75 kilometres to the southeast; Atlin Park 90 kilometres to the west; and Boya Lake Park 150 kilometres to the east along Highway 37.

Ecological Reserve Attributes

Conservation

- Protects three cold-water springs and associated mineral deposits, including one that has formed 6.5 metres high cone with a 20 metres diameter crater; these springs and their associated formations are provincially significant geological features.
- Situated within the very poorly represented Teslin Basin Ecosection. Only 0.03% of this ecosection is represented by protected areas. Charlie Cole Creek Ecological Reserve is the only protected area in the underrepresented Teslin Basin Ecosection.
- Lies within the well represented BWBSdk1 (Boreal White and Black Spruce zone Dry Cool subzone Liard variant) Biogeoclimatic Zone (21.95%); this ecological reserve contributes minimally to this representation accounting for only 0.05% of the total protected area representation of the BWBSdk1.
- Conserves a number of plant species associated with the calcium-rich mineral springs that are at the limits of their natural distribution. This includes the following species-at-risk: a) whitish rush (*Juncus albescens*) blue-listed, global rank - G4, provincial rank - S2S3; and, b) upright primrose (*Primula stricta*) blue-listed, global rank - G5, provincial rank - S2S3
- Preserves unusual and provincially significant plant communities associated with the mineral springs and calc-tufa deposits.
- Protects mineral springs that are used by wildlife as mineral licks.

Education and Research

- Presents potential for scientific research on the geological and developmental history of cold-water mineral springs, and the distribution of plants related to calcium-rich soils.
- Offers little opportunity for educational uses because of the ecological reserve's remote location.

Commercial Business Opportunities

- Due to the sensitive nature of the ecological reserve, human use activities, except for research and limited education, should be discouraged. There are no opportunities for commercial use.

Cultural Heritage

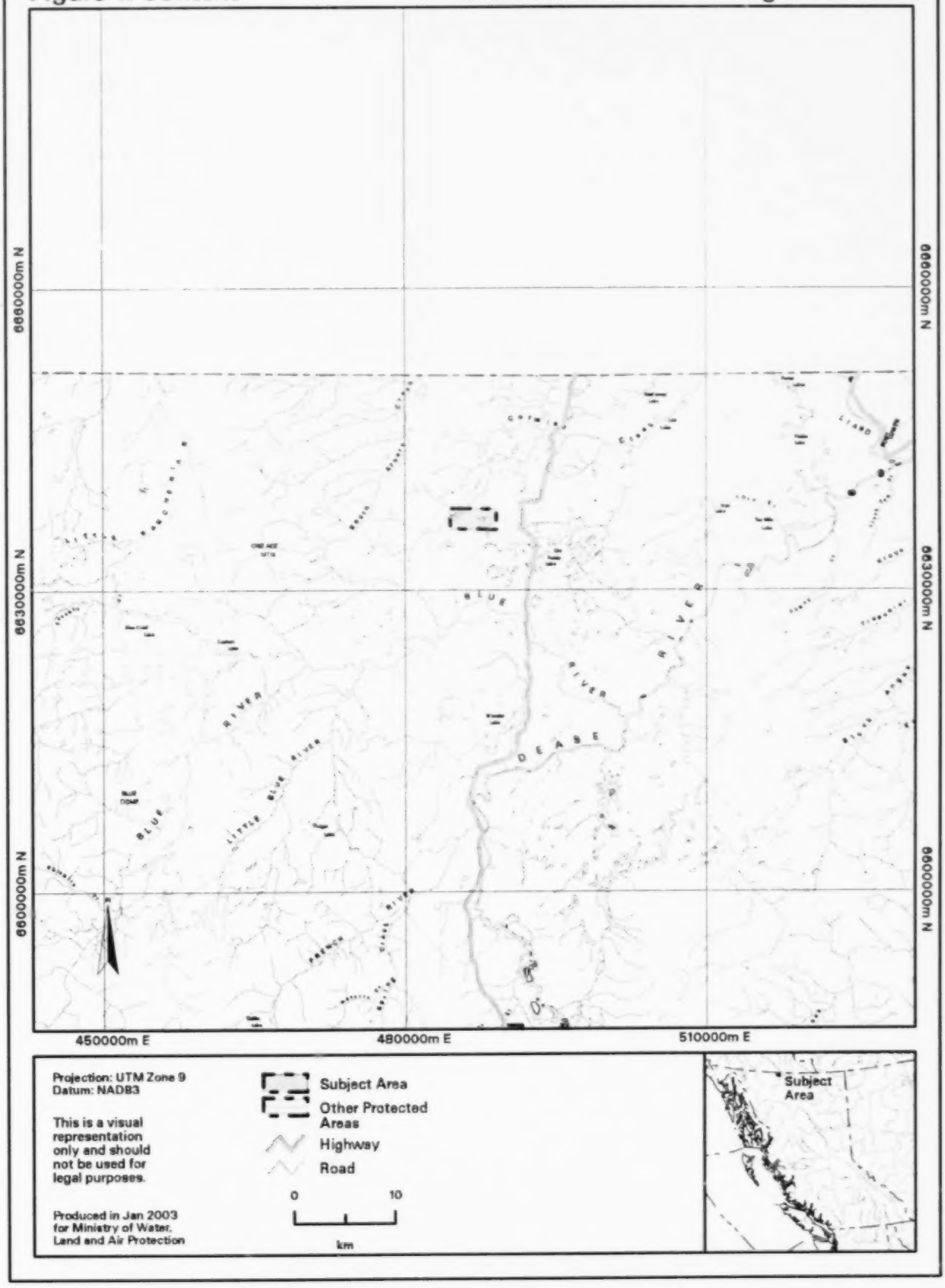
- The Archaeological Inventory Data Centre has no records of archaeological sites within the boundaries of the ecological reserve.
- First Nations may have completed traditional use studies which may provide additional information.

Significance in the Protected Areas System

- Protects a provincially significant geological feature that is rare in northern British Columbia.
- Conserves a rare habitat type that contains at least two rare plant species.

Figure 1: Context

Blue/Dease Rivers Ecological Reserve



Land Uses, Tenures and Interests

Access

Charlie Cole Creek Ecological Reserve is extremely remote and access is difficult. Access can be gained by helicopter or by boat along Teslin Lake and up Teslin River to Hutsigola Lake, followed by a seven kilometre walk to the ecological reserve.

Existing Tenures, Alienations and Encumbrances

- No existing tenures, alienations or encumbrances affect the ecological reserve.

Adjacent Patterns of Land Use

- The adjacent lands are mostly used for hunting, trapping and recreational activities. No industrial land use occurs in the area.
- A letter from BC Parks in 1999 indicates that a buffer be placed around the ecological reserve in any commercial backcountry recreation permits.

First Nations Interests

- The Teslin Tlingit Council and the Taku River Tlingit First Nation indicate that Charlie Cole Creek Ecological Reserve lies within their asserted traditional territory.

Other Agency Interests

- Ministry of Water, Land and Air Protection, Skeena Region Fish and Wildlife Science and Allocation Section has an interest in wildlife species in the ecological reserve.
  - Lies within Wildlife Management Unit 6-25.
- Ministry of Sustainable Resource Management (British Columbia Conservation Data Centre (CDC)) has an interest in rare species and species at risk in the ecological reserve.

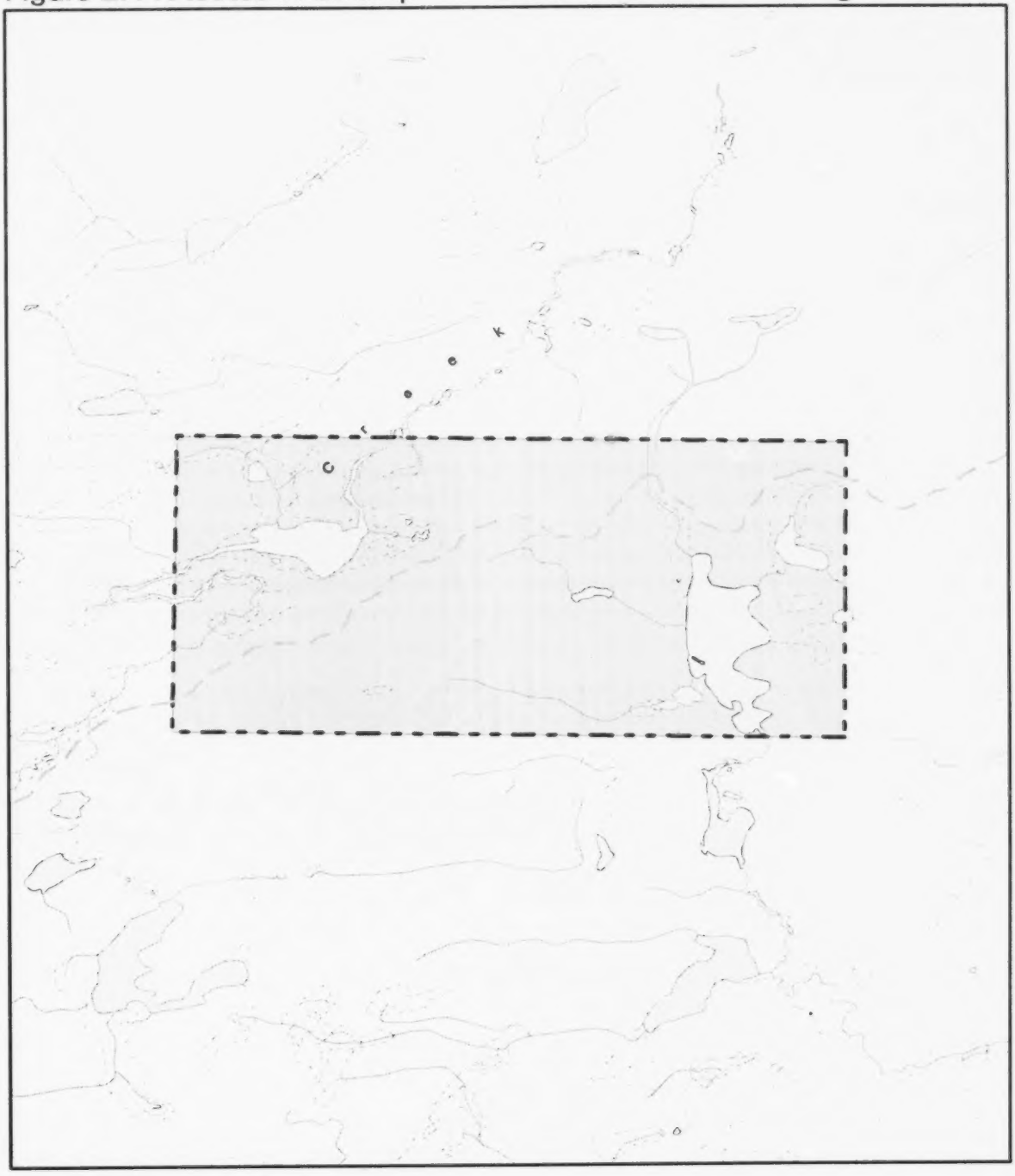
Private and Public Stakeholder Interests

- Residents of the region and the communities of Dease Lake, Atlin, and Good Hope Lake have an interest in the ecological reserve because of its contribution to conservation in the region.
- Federation of British Columbia Naturalists have an interest in the ecological reserve because of its protection of significant natural features.
- Education and scientific research institutions have an interest in the ecological reserve because of the rare plant species and the special ecosystems associated with the mineral springs.
- Friends of Ecological Reserves have an interest in the ecological reserve because of the rare plant species and the special ecosystems associated with the mineral springs.

Role of Charlie Cole Creek Ecological Reserve

The primary role of Charlie Cole Creek Ecological Reserve is to conserve three cold-water mineral springs and their associated landforms and vegetation. The ecological reserve serves a secondary research and education role by providing opportunities for the study and research into the development of cold-water mineral springs and their associated plant communities.

Figure 2: Protected Area Map Blue/Dease Rivers Ecological Reserve



Projection: UTM Zone 9
Datum: NAD83

Subject Area

0 1
km

Produced in Mar 2003 for Ministry of Water, Land and Air Protection

This is a visual representation only and should not be used for legal purposes.

Management Commitments and Issues

Management Direction from Previous Planning

A fire management plan from 1997 indicates that all fires in the ecological reserve will receive initial attack.

Management Issues

Theme	Issue
Protecting ecological values	• The ecological reserve's flora and fauna, especially rare plant species and plant communities, may be at risk because of the lack of inventories and mapping. • The plant communities associated with the mineral springs may be at risk because of the lightweight and crumbly nature of the calc-tufa deposits they grow on. • Unauthorized use of the ecological reserve may be occurring but is not detected because of a lack of ranger patrols and an ecological warden. • The "initial attack" policy advocated in the 1997 fire management plan may be inappropriate because of the ecological reserve's forest context and the goal of letting natural processes unfold without human interference.
Protecting rare geological features	• The calc-tufa deposits that make up the cone and surround the springs are fragile because of the soft crumbly nature of the deposits.
Protecting cultural heritage values	• The ecological reserve's cultural heritage values may be at risk because an inventory of these values does not exist.
Providing ecological reserve information	• Visitors to the area may be unaware of the area's ecological reserve status because the ecological reserve's boundary is not signed.

Management Direction

Priority Management Objectives and Strategies

Objective	Strategy
To protect the ecological reserve's ecological values	• Complete an inventory of the ecological reserve's flora, fauna and important habitats. ➢ Priority must be given to species-at-risk, rare plant species and rare plant communities. ➢ Ensure that any inventory, research or educational activities do not harm these communities or the substrates they grow on. • Provide signage to notify visitors of the ecological reserve boundaries. • Recruit an ecological reserve warden for the ecological reserve to conduct yearly monitoring visits and provide site reports. • Reassess the 1997 fire management plan to determine whether "initial attack" is the desired policy for this ecological reserve.
To protect the ecological reserve's geological values	• Ensure that any use that occurs in the ecological reserve does not impact upon the integrity of the mineral springs, cone and associated deposits.
To protect the ecological reserve's cultural values	• Investigate and collect information on cultural heritage values, and work to protect these values.

Objective	Strategy
To protect First Nations values	• Work cooperatively with the First Nations to build positive working relationships, and to assist in the protection of cultural heritage values and good ecological reserve management. • Seek the cooperation of pertinent First Nations to review the recent First Nation's traditional use studies for this area.
To provide information to ecological reserve's visitors	• Ensure the Ministry of Water, Land and Air Protection web site continues to provide accurate and current information about the Charlie Cole Creek Ecological Reserve. • Ensure that signage is in place to notify visitors of the area's ecological reserve status.

Consultation and Future Planning

Environmental Stewardship Division will continue to consult with all interested First Nations and other stakeholders regarding management of this ecological reserve. Environmental Stewardship Division considers Charlie Cole Creek Ecological Reserve of low priority for the development of a management plan with full public involvement. This management direction statement will be reviewed and revised, if necessary, in five to seven years.

Appendix 1. Charlie Cole Creek Ecological Reserve
Table of Acceptable Activities, Uses and Facilities.

Activity/Use/Facility	Acceptability
Aboriginal traditional uses and activities	Y
Hunting	N
Fishing	N
Trapping	N
Grazing (domestic livestock)	N
Recreational Gold Panning/Rock Hounding	N
Utility corridors	N
Communication Sites	N
Horse Use/ Pack Animals	N
Guide Outfitting (hunting)	N
Guide Outfitting (fishing)	N
Guide Outfitting (nature tours)	N
Guide Outfitting (river rafting)	N
Cat-Assisted Skiing	N
Ski Hills	N
Commercial Recreation (facility-based)	N
Commercial recreation (non-facility based)	N
Backcountry Huts	N
Water Control Structures	N
Fish Stocking and Enhancement	N
Road Access	N
Off-road Access (snowmobiling)	N
Off-road Access (motorized)	N
Off-road Access (mechanical activities)	N
Motorized Water Access	N
Aircraft Access	N1
Fire Management (suppression)	M
Fire Management (prescribed fire management)	N
Fire Management (prevention)	M
Forest Insect/Disease Control	N1
Noxious Weed Control	N1
Exotic Insect/Disease Control	N1
Scientific Research (specimen collection) by permit only	M
Scientific Research (manipulative activities) by permit only	M
Supervised Education and Scientific Observation by permit only	Y

Y= allowed subject to conditions identified in the management direction statement or management plan
M= may be permitted if compatible with protected area objectives
N= not allowed
N1= allowed for expressed management purposes only
N2= present and allowed to continue but not normally allowed